

¼ λ Mobile Antenna for the 160 MHz Band

DESCRIPTION

- Black-chromed, conical stainless steel whip.
- Elegant transition between whip and mounting surface due to slim-line mount.
- 30° tiltable whip.
- Stainless steel X-mount with M6-thread whip-fastening system.
- Simple mounting exclusively with access from the outside.
- Models available with X-mount (oblong), XG-mount (oblong with GPS), CX-mount (circular) and MM-mount (magnetic).
- Choose between four connection possibilities:
 - X-mount, CX-mount, MM-mount: FME-connection (supplied without cable).
 - XP4-mount, CXP4-mount: Permanently attached 4 m cable terminated with FME-connector.
 - XG-Combi mount: FME-connection and GPS (supplied without cable).
 - XGP4-Combi mount: Permanently attached 4 m cable terminated with FME-connector for whip and 0.15 m RG 178 with MFME for GPS.
- Easily removable whip for car wash.
- GPS-antenna for fixed installations.
 - Full hemispherical coverage.
 - Built-in high-gain, low-noise amplifier.
 - **Right-Hand Circular Polarization (RHCP).**
 - 2.85 V - 5 V supply voltage (typical 3 V).



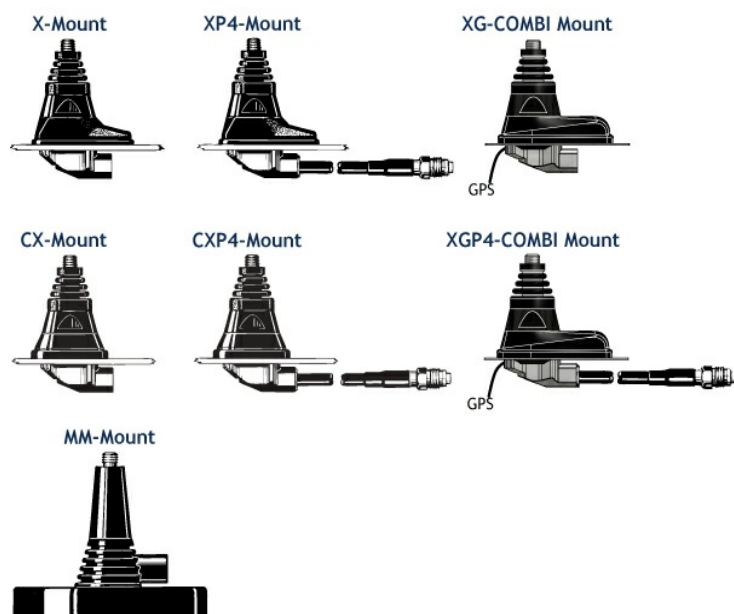
SPECIFICATIONS

Electrical	
Model	MH 1-XR, MH 1-XGR, MH 1-CXR, MH 1-MMR
Frequency	Tunable by cutting within : 144...175 MHz (Also applicable : 175...480 MHz)
Antenna Type	Mobile whip antenna
Max. Input Power	150 W Max. Power for models incl. GPS, is reduced to 30 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	≤ 1.3 @ f. res.
Bandwidth	≥ 15 MHz @ VSWR ≤ 2.0
Gain (EIA RS-329-1)	0 dB
Mechanical	
Materials	Whip : Black-chromed Conical stainless steel Black-chromed brass Mount : Black-chromed brass Weather- and shockproof plastics Stainless steel
Installation Torque	4 ±1 Nm
Colour	Black
Height	Approx. 550 mm / 21.65 in.
Weight	X-version : Approx. 70 g XP4-version : Approx. 210 g CX-version : Approx. 70 g CXP4-version : Approx. 210 g XG-version : Approx. 90 g XGP4-version : Approx. 230 g MM-version : Approx. 310 g

ORDERING

Model	Product No.	Description
MH 1-XR	130000708	X-mount (oblong) with FME-system
MH 1-XP4R	130000710	XP4-mount with 4 m cable and FME-connector (oblong)
MH 1-XGR	130002059	XG-Combi mount (oblong) with FME-system and GPS
MH 1-XGP4R	130002063	XGP4-Combi mount with 4 m cable and FME-connector (oblong) and GPS
MH 1-CXR	130000709	CX-mount with FME-system (circular)
MH 1-CXP4R	130000711	CXP4-mount with 4 m cable and FME-connector (circular)
MH 1-MMR	130000707	MM-mount with FME-system (magnetic)

THE WHIP IS COMPATIBLE WITH ALL BELOW MOUNTS



INSTALLATION AND ASSEMBLY INSTRUCTIONS

Please refer to the data sheet of each individual mount to find the installation and assembly instructions.

PLEASE NOTE

For safety reasons: Do not operate the MiniMag with antenna whips longer than 60 cm. Please respect the maximum car speed limit corresponding to a particular whip length as appears from the above curve.

TUNING

The antenna should always be tuned using an VSWR-meter.
The cutting diagrams below serve as a guide for this procedure.

